

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A backlash reduction apparatus comprising:
means for advancing a substrate;
means for stopping advance of the substrate short of a final intended position;
and
means for finally advancing the substrate.
2. (Original) The apparatus of claim 1 wherein the means for stopping operates in response to a means for sensing substrate position.
3. (Original) The apparatus of claim 1 wherein the means for finally advancing comprises means for incrementally advancing the substrate.
4. (Original) The apparatus of claim 3 wherein the means for incrementally advancing comprises a position-controlled servo motor.
5. (Original) The apparatus of claim 3 wherein the means for incrementally advancing comprises a stepper motor.
6. (Original) The method of claim 5 wherein the means for finally advancing operates the stepper motor in full steps.
7. (Original) The method of claim 5 wherein the means for finally advancing operates the stepper motor in fractions of steps.
8. (Original) The method of claim 5 wherein the means for finally advancing operates the stepper motor in microsteps.
- 9-15. (Canceled)

16. (Original) A backlash reduction method comprising:
advancing a substrate to a point short of a final intended position;
finally advancing the substrate to the final intended position, thereby taking up
backlash in a substrate transport system.

17. (Original) The method of claim 16 further comprising monitoring substrate
position and sending substrate position information to a controller that initiates the advancing
and final advancing of the substrate.

18. (Original) The method of claim 16 wherein finally advancing includes
advancing the substrate at a lower speed than the speed at which the substrate was advanced
to the point short of the final intended destination.

19. (Original) The method of claim 16 wherein finally advancing includes
advancing the substrate incrementally from the point short of the final intended destination to
the final intended destination.

20. (Original) The method of claim 16 further comprising providing a drive
motor, providing a substrate transport driven by the drive motor, and advancing and finally
advancing the substrate is achieved by operation of the drive motor and substrate transport.

21. (Original) The method of claim 20 wherein providing a drive motor comprises
providing a stepper motor and finally advancing the substrate includes operating the stepper
motor in full steps.

22. (Original) The method of claim 21 wherein finally advancing the substrate
includes operating the stepper motor in fractions of steps.

23. (Original) The method of claim 21 wherein finally advancing the substrate
includes operating the stepper motor in microsteps.

24. (Currently Amended) A backlash reduction apparatus comprising:
- a drive motor operable in increments;
 - a drive train driven by the drive motor;
 - at least one substrate transport mechanism connected to the drive train and driven by the drive motor therethrough;
 - a controller comprising:
 - a substrate advancer in communication with the drive motor, the substrate advancer emitting control signals to the drive motor that cause the substrate to move to a point short of an intended destination; and
 - a substrate final advancer in communication with the drive motor, the substrate final advancer sending control signals to the drive motor that cause the substrate to continue to the intended destination; and
 - the backlash reduction apparatus ~~executing a method comprising:~~
 - advancing a substrate to a point short of a final intended position; and
 - finally advancing the substrate to the final intended position, thereby taking up backlash in a substrate transport system.